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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/806,345	03/23/2004	Marcus Johannes Henricus Willems Van Dijk	081468-0308818	3987
909 7590 11/01/2007 PILLSBURY WINTHROP SHAW PITTMAN, LLP P.O. BOX 10500 MCLEAN, VA 22102			EXAMINER KIM, PETER B	
			ART UNIT 2851	PAPER NUMBER
			MAIL DATE 11/01/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/806,345

Applicant(s)

WILLEMS VAN DIJK ET AL.

Examiner

Peter B. Kim

Art Unit

2851

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 August 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) 13-30, 32 and 33 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 11, 12 and 31 is/are rejected.
- 7) ☒ Claim(s) 7-10 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Applicant's arguments filed on Aug. 9, 2007 have been fully considered.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 6 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 6 is directed to the measurement device which comprises a sensor on the gripper. However, claim 1 is directed to the measurement device which is separate and displaced from the gripper, and thus contradicts claim 1 from which claim 6 depends.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 4, 5, 11, and 31 are rejected under 35 U.S.C. 102(e) as being anticipated by Sundar (6,856,863).

Regarding claims 1, 11 and 31, Sundar discloses a transfer apparatus and a method of transferring an object comprising a gripping device (120, 145) for releasing the object (substrate) at a first position (target) after gripping the object at a second position (Fig. 1) proximate to a receiver (target); a measurement (202, 204) device configured to measure a relative position of the gripper (120, 145) with respect to the receiver (target) in at least two direction (abstract, col. 3, lines 30 – col. 4, line 61), wherein a relative position error is determined with respect to a desired relative position based on the measured relative position and the relative position of the gripper and the receiver is adjusted based on the reduction of the relative position error in the second position (col. 4, lines 20-61, wherein the measurement device or the emitter 202 is separate and displaced from the gripper and the receiver 204 is on the gripper similar to the reference point in the instant application).

Regarding claims 4, and 5, Sundar discloses the relative position measured by measuring the distance between a first reference point (202) of the receiver and a second reference point (204) of the gripper.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2, 3, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sundar in view of Hine et al. (Hine) (6,591,160).

Sundar discloses the claimed invention as discussed above; however, Sundar does not disclose the object comprising a substrate or a mask, and Sundar does not disclose determining the position of the object relative to the gripper. Hine discloses a transfer apparatus (Fig. 1) comprising a gripper (52), a sensor (50) for determining position of the object (target -wafer, 46, see abstract) relative to the gripper (col. 9, line 45 – col. 10, line 13). Although Sundar discloses the object comprising a magnetic tape, as shown by Hine a substrate or a mask is also transferred by the similar device from a similar rack or library. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the object comprising a mask or a substrate to be transferred by the invention of the Sundar because a magnetic tape or a mask or a substrate required precise positioning and transportation, and to provide the sensor to determine the relative position of the object and the gripper in order to ensure more precise positioning and accuracy as taught by Hine in col. 3, lines 14-39.

Allowable Subject Matter

Claims 7-10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claim 7, none of the prior art of record teaches or discloses a transfer apparatus comprising the sensor provided on a stable frame and the first reference point on the gripper or the object and a second reference point on the receiver.

Regarding claim 8, none of the prior art of record teaches or discloses a transfer apparatus comprising a mechanical docking structure that docks the gripper to a frame and the measurement device comprises on the frame.

Regarding claims 9 and 10, none of the prior art of record teaches or discloses a transfer apparatus comprising minimizing the difference in relative velocity or acceleration between the gripper and the receiver.

Response to Arguments

Regarding the election requirement, applicant argues that claim 1 recites B_{specific} and claim 13 and 22 recite AB_{specific} . However, claim 1 is directed to transfer apparatus for transferring an object and claims 13 and 22 are directed to transferring a patterning device and a substrate, respectively. Therefore, claim 1 is more broad than claims 13 and 22, and thus, the restriction is proper.

In response to applicant's arguments, the rejection based on Kanai is withdrawn.

Conclusion

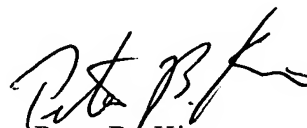
Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter B. Kim whose telephone number is (571) 272-2120. The examiner can normally be reached on 9:00 AM - 6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diane Lee can be reached on (571) 272-2399. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Peter B. Kim
Primary Examiner
Art Unit 2851

October 27, 2007